

182/554 DWPI(C) Thomson Derwent

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TI - Air battery with long discharge capacity - has air port sealed by compound film satisfying transmittance condition for various gases. NoAbstract Dwg 0/1

DC - X16

PA - (TOKE) TOKYO SHIBAURA DENKI KK

NP - 1

NC - 1

PN - JP58186173 A 19831031 DW1983-49 9p *

PR - 1982JP-0067368 19820423

IC - H01M-012/06

UP - 1983-49

394/554 PLUSPAT(C) QUESTEL-ORBIT- image

CPIM (C) JPO

PN - JP58186173 A 19831031 [JP58186173]

TI - (A) AIR CELL

PA - (A) TOKYO SHIBAURA ELECTRIC CO

PA0 - (A) TOSHIBA CORP

IN - (A) SASAKI KUNIIHIKO

AP - JP6736882 19820423 [1982JP-0067368]

PR - JP6736882 19820423 [1982JP-0067368]

IC - (A) H01M-012/06

EC - H01M-012/06

DT - Basic

STG - (A) Doc. Laid open to publ. Inspec.

AB - PURPOSE: To secure an air cell that will not go down in a discharge capacity even when it is stored for a long period of time, by using such a sealing material as one made up of more than two kinds of layers of a film comprising a constituent element being small in at least either transmissivity among steam, oxygen and carbon dioxide gas transmissivities.

- CONSTITUTION: An air hole 10 is hermetically sealed by a sealing material 11 that implies a composite film which is formed by laminating more than two kinds of film capable of satisfying at least either one of the following conditions and is also able to meet any of the following conditions, while those conditions are, steam transmissivity below 900, oxygen transmissivity below 5, and carbon dioxide gas transmissivity below 20, (each unit of above numerical values is $X10^{11}cc.cm^{sup 2}.Hg$ in either case). In this connection, as a resin material being small in steam transmissivity there are polyvinyl fluoride, nylon 11, polytriethylenechloride fluoride and vinyl chloride-vinylidene chloride copolymer, while as a resin material being small in oxygen and carbon dioxide gas transmissivity, those of polyvinyl fluoride, polyvinylidene fluoride, nylon 6, nylon 11, damp-proof cellophane, etc., can be enumerated.

- COPYRIGHT: (C)1983,JPO&Japio

REFERENCE

186.173
JA
UNEXAMINED
ENGLISH DIGEST

83, TR.

Japanes Unexamined Patent Application: 58-186173, October 31, 1983

Title: Air Cell

Application: April 23, 1982 Sr: 57-67368

Inventors: K. Sasaki

Applicant: Toshiba Electric Co.

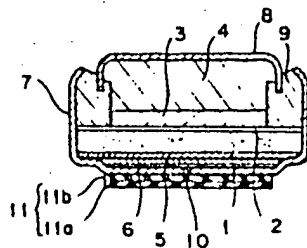
It relates to a structure of a long-life air cell.

In an air cell, cathode sealant layer must stop penetration of steam, O₂, CO₂ etc in order to achieve long life.

In this invention, a laminated layer (11) is used which is made of two or more layers of materials satisfying at least two of the following conditions: 1) steam permeation less than 900, 2) oxygen permeation is less than 5 and 3) CO₂ permeation is less than $20 \times 10^{11} \text{ cc} \cdot \text{cm} / \text{sec} \cdot \text{cm}^3 \cdot \text{cmHg}$, and satisfying all the above condition as the laminated layer.

<u>Example:</u>	<u>1st layer</u>	<u>2nd layer</u>
	poly trichloro ethylene	cellophane
	"	nylon 6
	poly vinylfluoride	cellophane
	"	nylon 6

Claim: Air cell in which a laminated layer of materials satisfying above conditions is used as sealant layer.



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